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# Negation, Structure, Transformation: Alain Badiou And The New Metaphysics

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**Abstract:** In this article, I discuss Alain Badiou’s 2008 address titled “The Three Negations.” Though the text was originally presented in a symposium concerning the relationship of law to Badiou’s theory of the event, I discuss the way this brief address offers an introduction to the broad sweep of Badiou’s metaphysics, outlining his accounts of being, appearing, and transformation. To do so, Badiou calls on the resources of three paradigms of negation: from classical Aristotelian logic, from Brouwer’s intuitionist logic, and in paraconsistent logics developed by DaCosta. I explain Badiou’s use of negation in the three primary areas of his metaphysics, as well as to diagnose the degrees of transformation that may have occurred in a situation. My analysis of Badiou’s use of negation in this text is aided by examples from his broader ontological oeuvre. I also explain the underlying requirement in Badiou’s work that formal considerations – mathematical or logical – get their sense by being tethered to readily-identifiable political, aesthetic, scientific, or interpersonal concerns. I conclude by addressing the foundation Badiou’s work establishes for pursuing a new metaphysics, and by discussing certain of the liabilities that remain in the wake of his account.

**Keywords:** Alain Badiou, Aristotle, event, intuitionist logic, paraconsistent logic, law, Newton DaCosta, ontology, Markus Gabriel, negation, analytic/continental divide.

The “new metaphysics” marks an increasingly porous border between continental and analytic approaches to questions concerning being, appearing, transformation, and truth. In service of these questions and in what follows, I attend to the contents of Alain Badiou’s 2008 address titled “The Three Negations.” I discuss its status as an introduction to his broad metaphysical project, which continues to unfold across three volumes: *L’Être et l’événement* (1988; published in English as *Being and Event* in 2005); *Logiques des Mondes* (2006; in English as *Logics of Worlds* in 2009), and a forthcoming third volume titled *L’immanence des vérités* (The Immanence of Truths).<sup>1</sup> Though “The Three Negations” lacks the technical specificity and formal mathematical and logical apparatuses of the full-length texts, what is perhaps remarkable about Badiou’s 2008 address is its succinct capture of concepts at the core of his metaphysics. In this presentation, Badiou mines classical Aristotelian, intuitionist, and paraconsistent logics for their respective accounts of negation. He uses these varieties of negation to support an account of structure at the level of being, appearing, and transformation (respectively), and to describe degrees or *intensities* of transformation as strong, weak, or false. “The Three Negations” also reminds Badiou’s reader of a deep requirement of his metaphysics: that it be legible in political, aesthetic, scientific, or amorous relationship. I briefly discuss this requirement and conclude by addressing the resources Badiou’s work offers for pursuing a new metaphysics, as well as certain of the questions and liabilities that remain after Badiou’s work.

<sup>1</sup> Though the publication of this text was proposed for 2017, it has not (as of this writing) yet appeared. In fall 2017, Badiou offered a seminar on “The Immanence of Truths” at Princeton University. Badiou’s opening lecture (in English), available online at <https://www.youtube.com/watch?v=rF9Xhj0agjs>. The content of Badiou’s final seminar (2015-2017) on the topic is transcribed at <http://www.entretemps.asso.fr/Badiou/15-16.htm>.

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## 1 Occasion of the address

“The Three Negations” is Badiou’s contribution to a symposium on his work, convened at Cardozo Law School in 2008. Titled “Law and Event”, the symposium addressed the relation of event and truth—concepts used to indicate transformation in Badiou’s work—to jurisprudence and legal theory.<sup>2</sup> In Peter Goodrich’s prefatory remarks, he introduces Badiou’s work to the audience and explains the significance of Badiou’s work for understanding the law and its capacity for transformation.

Goodrich acquaints the Cardozo audience with Badiou by situating him as “French and not-quite-French,” insofar as Badiou’s work resists the kinds of characterization that attended work by Foucault, Deleuze, and Derrida in Anglo-American circles.<sup>3</sup> According to Goodrich, Badiou and his work are unique, traversing otherwise consolidated modes of discourse. These include “traditional” French theory, expressed in Badiou’s link to work by Lacan and Althusser; a theoretical apparatus balancing interests in subjectivity and ontology with formal systems of logic and mathematics, evident in Badiou’s early *The Concept of Model* (1969) through the contemporary major works; and an approach that negotiates politically-charged metaphysics in a way, speaking of *Being and Event*, that is not “of obvious appeal to the humanities.”<sup>4</sup> In identifying these traversals, Goodrich concludes his remarks by noting that Badiou represents “a certain rigor of thought and for a political apprehension of literature, ethics, epistemology,” and the immediate context of Goodrich’s remarks, “tentatively, law.”<sup>5</sup>

The law is, by nature, designed to resist the irruption of the novel and dispatch contradiction using established precedent; put another way, the event is prohibited by the law from appearing. As Goodrich explains, the law, “by convention or position, always already exists. It is promulgation or precedent, prerogative or pontification, custom or use, and it is law precisely to the extent of its prior existence.”<sup>6</sup> The law’s credibility, then, depends on its deep-seated status (on the one hand), which underwrites its ability to maintain social stability.<sup>7</sup> However, in the wake of an event, Goodrich explains, “The legal is abandoned in favor of the non-legal, indeed the illegal.”<sup>8</sup> It is this contradictory relationship, the pressure an event exerts on the law and its function in *negating* the law, which forms the focus of the Cardozo symposium.

## 2 “The Three Negations”: Being, appearing, and varieties of transformation

“The Three Negations” addresses the prospects for transformation and its relation to structure by addressing logic and its laws, focusing especially on negation, which expresses the status of the law of non-contradiction (LNC) and the law of excluded middle (LEM) in a given logical framework. Badiou is interested in negation in Aristotle’s work, since the principles of LNC, LEM, and double negation form

<sup>2</sup> The contents of the symposium are available at <http://www.cardozolawreview.com/volume-29-issue-5.html>.

<sup>3</sup> Goodrich, “Preface.” Goodrich cites François Cusset’s *French Theory: How Foucault, Derrida, Deleuze & Co. Transformed the Intellectual Life of the United States* as describing a “characteristic” reception of French theory in the U.S. As Goodrich points out, Badiou receives only “scant mention” in a couple of places in Cusset’s text, considered briefly alongside Jacques Rancière, and in a discussion of Badiou’s *Ethics: An Essay on the Understanding of Evil* (originally *L’ethique: Essai sur la conscience du Mal*). Cusset discusses *Ethics* in connection with Badiou’s thoroughgoing critique of the “New Philosophers” in France, a group of thinkers that disavowed their leftist commitments in the 1970s and 1980s, and a target of Badiou’s ire from 1977 to the present (Cusset, *French Theory*, xix).

<sup>4</sup> Goodrich, “Preface,” 1868.

<sup>5</sup> *Ibid.*, 1869.

<sup>6</sup> *Ibid.*, 1870.

<sup>7</sup> On this point, Goodrich explains, “the authors of common law state with some stringency that where law is vague, uncertain, ill-defined, the sociality exists in a state of misery” (“Preface,” 1870).

<sup>8</sup> Goodrich, “Preface,” 1870.

“the core of classical logic.”<sup>9</sup> From this point of origin, Badiou follows the trajectory of negation to forms of logic beyond the classical, to intuitionist logic (particularly that of L.E. J. Brouwer) and paraconsistent logic (developed by the Brazilian logician Newton DaCosta). As I explain in the following two sections, Badiou understands this trajectory according to two valences: the first is the development of negation as a tool in three key areas of his metaphysics – *being*, *appearing*, and *event*; the second is the use of negation to diagnose degrees of transformation as *strong*, *weak* or *false*.

### 3 Negation in being, appearing, and the event

With his focus trained on the formal expression of negation, Badiou begins by identifying four modes in which negation may be deployed. The first, following the Aristotelian paradigm, maintains both LNC and LEM: one cannot assert propositions P and non-P at the same time and in the same context (LNC); and either P is true and non-P is false, or non-P true and P false – there is no third option (LEM). Aristotle presents these laws in *Metaphysics* Gamma as antidotes to “the unqualified doctrine which would prevent us from determining anything in our thought,” and ensure the quality of judgments about the world.<sup>10</sup> For Badiou, this classical paradigm organizes relationships in his ontology.<sup>11</sup>

In Badiou’s ontology, he explains, “a thing is a pure multiplicity without any qualitative determination.”<sup>12</sup> This claim, which serves as a pithy presentation of the “radical thesis” on which Badiou’s larger ontological project is founded, suggests that the relation of any multiplicities must be *quantitative*.<sup>13</sup> This strong Aristotelian form of negation governs the relationship of consistent multiplicities (or sets) to one another. Classical negation is a tool by which this quantitative differentiation is possible, accounted for by the presence of corresponding elements between two sets (in cases of extensional or equivalent multiples) or non-corresponding elements (in different multiples).

Badiou explains, “In classical logic, the negation of P excludes not only P itself, but any other possibility concerning the contents of the proposition P.”<sup>14</sup> When both LNC and LEM hold, the negation is total; there are no stray elements of P in non-P. He demonstrates this as follows:

First define P as a multiplicity, or as a set. Define non-P as the set of all elements which do not belong to P. The result, by extensionality, is that non-P is absolutely different from P. P and non-P have nothing in common. So it is impossible to find something which is simultaneously in P and in non-P. So the principle of non-contradiction is true. Second, every element which is not in P is in non-P, by definition of non-P. So there is no third possibility: something is always either in P or in non-P. And the principle of excluded middle is true.<sup>15</sup>

The operations of LNC and LEM here serve to reinforce *via negation* the identity of a set of elements; P is absolutely different from non-P. In his accounting of the example of friend and enemy at the text’s beginning, Badiou describes this relationship as one of “destruction ... the most radical form of negation.”<sup>16</sup>

<sup>9</sup> Badiou, “The Three Negations,” 1878. Badiou affirms the presence of negation in Hegel’s work, where “negation of negation ... is the concept of first affirmation, its reflexive existence” (and echoed in the paraconsistent system), and in Marx’s work as the vision of revolution,” the destructive transgression of oppressive laws (1878-9). Readers curious about the development of this text in a Hegelian context may be interested to consider Frank Ruda’s “Working Through: What Is Your Dialectics?,” appearing in his 2015 *For Badiou*. Similarly, Benjamin Noys’s “On the Edge of the Negative: Badiou” reads “The Three Negations” according to trajectories of affirmation and negation in contemporary continental philosophy.

<sup>10</sup> Aristotle, *Metaphysics*, trans. W.D. Ross, 1009a4-5.

<sup>11</sup> Badiou, “The Three Negations,” 1880: “It is clear that the logic of being qua being is a classical one.”

<sup>12</sup> Badiou, “The Three Negations,” 1880.

<sup>13</sup> The ‘radical thesis’ reads, “Insofar as being, qua being, is nothing other than pure multiplicity, it is legitimate to say that ontology, the science of being qua being, is nothing other than mathematics itself” (Badiou, *Being and Event*, xiii). In *Being and Event*, Badiou develops this relation using Cantor’s distinction of inconsistent from consistent multiples, a difference that is determined qualitatively; a consistent multiple is a set that can be closed without contradiction, while inconsistent multiplicity cannot be a set, since to ‘close’ it would produce a contradiction

<sup>14</sup> Badiou, “The Three Negations,” 1879.

<sup>15</sup> *Ibid.*, 1880.

<sup>16</sup> *Ibid.*, 1877.

Because LNC and LEM hold here with no variance, the truth of  $P$  requires the elimination of non- $P$ . It is by the mechanism of negation that a multiple is determined to be consistent, and that a multiple is determined to be different from another.

There is a diametrically opposed mode of negation, which Badiou acknowledges and summarily dismisses. This position (enumerated last in Badiou's presentation) maintains neither LNC nor LEM. One could assert both  $P$  and non- $P$  at the same time and in the same context, and since LEM does not hold, the truth values of  $P$  and non- $P$  are indeterminate. There is no framework for statements about  $P$  and non- $P$  to attach, and as Badiou claims, this mode entails "the complete dissolution, under the name of negation, of all potency of negativity."<sup>17</sup> In other words, for negation to function, either non-contradiction, excluded middle, or both must be operative – otherwise, the framework is inconsistent and the statements it produces resist determination or evaluation. This is the "unqualified doctrine" Aristotle warns against at the conclusion of *Metaphysics* Gamma 4.

However, between the margins of classical logic's maximum consistency and the maximum inconsistency emerging from the absence of both LNC and LEM, Badiou identifies two other modes of negation. The second of four modes, associated with the intuitionist paradigm and work of L.E.J. Brouwer, "obeys the principle of contradiction but not the excluded middle."<sup>18</sup> In this framework, LNC provides a kind of *limit* on assertions to protect against inconsistency; however, because the intuitionist paradigm does not obey LEM the truth and falsity of any proposition  $P$  or non- $P$  is undetermined until a proof for that proposition's truth value is constructed.<sup>19</sup>

In "The Three Negations," an intuitionist framework governs "the logic of appearing, or of existence."<sup>20</sup> The site of appearing is a *world*, which Badiou defines in *Logics of Worlds* as "the place where objects appear" and the contingent relations between elements in that "closed ontological set."<sup>21</sup> The example Badiou invokes in the address is "the great field of the law," in which propositions concerning guilt and innocence (elements of a world determined according to particular discursive practices) are not absolute and subject to modifications after a body of evidence is presented.<sup>22</sup> Badiou explains, "If the sentence  $p$  is 'guilty' and non- $p$  is 'innocent,' we always have a great number of intermediate values, like 'guilty with attenuating circumstances,' or 'innocent because certainly guilty, but with insufficient proof'.<sup>23</sup> In this range of possibilities seated in a concrete discursive framework like the law, Badiou asserts the value of intuitionist logic, its affirmation of LNC, and the suspension of LEM's determinative status *prima facie*. As Zachary Fraser explains, intuitionist logic reads the gap between  $P$  and non- $P$  as "a simple *indetermination* of existence, by which the intuitionist always means subjective constitution."<sup>24</sup> This indetermination transfers to Badiou's work in two ways: in *Being and Event*, intuitionist logic governs the actions and work of the subject tasked with identifying and affirming the consequences of any event (the identification of a truth); in "The Three Negations," indetermination governs the operations of a finite and determinate world – like the law – where some slippage in the strict determination of a proposition's truth or falsity is admitted.

Badiou's favorable view of intuitionist logic in "The Three Negations" marks a transformation in his own thinking, one coincident with the account of appearing in *Logics of Worlds*. Fraser points out that Badiou's disposition toward intuitionist logic before this point is unfavorable; in "Philosophy and Mathematics: Infinity and the End of Romanticism," appearing originally in 1992's *Conditions*, Badiou claims that

<sup>17</sup> Ibid., 1879.

<sup>18</sup> Ibid.

<sup>19</sup> As Zachary Fraser explains, "Because the intuitionist identifies the truth of a statement with the construction that validates it, and the falsity of a statement with the construction that demonstrates its absurdity, (the intuitionist) no longer has any grounds for maintaining that a given statement  $A$  is either true or false prior to the effectuation of the relevant construction" (Fraser, "The Law of the Subject," 106-107).

<sup>20</sup> Badiou, "The Three Negations," 1881.

<sup>21</sup> Badiou, *Logics of Worlds*, 598.

<sup>22</sup> Badiou, "The Three Negations," 1881.

<sup>23</sup> Ibid.

<sup>24</sup> Fraser, "The Law of the Subject," 108.

intuitionism “remains enslaved to the Romanticist tradition.”<sup>25</sup> Fraser explains the critique of intuitionism appearing in *Being and Event* follows from the mistaken assumption that intuitionism is “determinately trivalent, that is, to be a logic with three determinate truth values.”<sup>26</sup> This earlier skepticism of intuitionism is overturned in “The Three Negations,” where Badiou recognizes that the absence of LEM leads to an *advantageous* indeterminacy, allowing for any proposition’s truth or absurdity to be constructed, rather than prescribed outright.

If classical logic governs Badiou’s account of being, and the mode of negation in intuitionist logic organizes appearing and world, then paraconsistent logic, “created and developed by the Brazilian school, and notably by the great logician DaCosta”<sup>27</sup>, offers a framework for understanding how an event might appear. Newton DaCosta, Jean-Yves Béziau, and Otávio Bueno explain that their system of paraconsistency C1+ serves as a kind of supplement to “the extant formalisms,” expanding the range of evaluation in order to accommodate “specific mathematical and logical problems, not possibly addressed to (*sic*) within a classical framework.”<sup>28</sup> In short, paraconsistent systems accommodate a broader range of consideration by suspending LNC to entertain apparently contradictory statements while maintaining (at minimum) LEM as a tool for evaluating the truth value of the statements. Where intuitionist logic posits LNC and evaluates statements using LEM after the fact, paraconsistency reverses this by positing LEM as the rule that must be observed when LNC is suspended.

DaCosta, Béziau, and Bueno insist that the function of the conditional, conjunctive, and disjunctive connectives, along with their properties, are deployed in C1+ in a way consistent with a traditional propositional calculus.<sup>29</sup> Negation, however, “must be a *paraconsistent negation*, in the sense that there is at least a theory T from which we can deduce a formula *a* and its ‘negation’  $\sim a$  (T is inconsistent), but such that there is a formula *b* which cannot be deduced from T (T is *non-trivial*).”<sup>30</sup> Put another way, what makes a system like C1+ paraconsistent is the unproblematic co-presence in that system of a proposition *P* and its negation non-*P*; however, though C1+ is inconsistent (since LNC does not apply), there must be at least one formula that *cannot* be asserted in the system. The protection against triviality is maintained, in part, by the persisting rigidity of the conditional, conjunctive, and disjunctive connectives. This feature of paraconsistency prevents C1+ from collapsing into total inconsistency, that fourth mode of negation Badiou discusses at the beginning of his address.

Though it is possible that *P* and non-*P* may appear simultaneously in a world, LEM requires that one or the other be true. However, discerning which proposition is true demands attention to the context(s) in which these competing claims are asserted. DaCosta, Béziau, and Bueno suggest that when a contradiction is present, “interesting reasonings” are still available,

...and in many cases it is simply not possible to know which is the wrong choice and which is the right one. Maybe there is *in reality* no contradiction. But it seems that contradictions are enclosed in an important amount of complex knowledge.<sup>31</sup>

Attention to this “complex knowledge” turns the inquiry toward the conditions from which this apparent contradiction emerges. DaCosta, Béziau, and Bueno work an example in the field of medicine – competing and contradictory diagnoses - to highlight the tolerance in C1+ for contradiction.<sup>32</sup>

Paraconsistency’s function in a Badiouian world is first used to authorize the presence of an event *qua* contradiction, “a sudden change of the rules of appearing; a change of the degrees of existence of a lot of multiplicities which appear in a world.”<sup>33</sup> When an event occurs, it challenges the existing order in

<sup>25</sup> Ibid., 106. Fraser’s reference is to this text’s appearing in *Badiou: Theoretical Writings*, 25.

<sup>26</sup> Fraser, “The Law of the Subject,” 108.

<sup>27</sup> Badiou, “The Three Negations,” 1879.

<sup>28</sup> Da Costa, Béziau, and Bueno, “Aspects of Paraconsistent Logic,” 611.

<sup>29</sup> Ibid., 599-600.

<sup>30</sup> Ibid., 600.

<sup>31</sup> Ibid., 608-609.

<sup>32</sup> Ibid., §4.2 (pp. 609-610).

<sup>33</sup> Badiou, “The Three Negations,” 1881.

place in any world simply by being present alongside that order; by way of reminder, the world at issue in the Cardozo symposium is the relationship of law – order *sine qua non* – to an event. To see how this challenge is accommodated or absorbed, Badiou applies these three logical systems to his account of the event.

## 4 Negation and degrees of transformation

Badiou bifurcates these logics when discussing the relation of an event to the world; that is, there is a way these logics govern respective domains of his metaphysics (being, world, event) *and* an application of these logics to the event itself. The world, for Badiou, is a site of transaction, where an event and its consequences are worked out to differing degrees, based on the *intensity* of transformation that has occurred. Intensity is measured according to the number of possible values that might be assigned to an event. For example, Badiou explains that in the case of a true event, the intensity of change is maximal: “That sort of world,” Badiou explains, “with only two degrees of intensity, is always classical.”<sup>34</sup> Thus, in addition to asserting classical logic as the logic of being, it is also the logic of change at its most dramatic and transformative. Negation is also an action, a *negating* or a *having negated*, rather than a static property of logical formulation. Its force as a gerund comes from negation’s deployment in service of transformation, accomplishing the destruction of the old order in favor of a new one.

Though there are a number of well-documented instances of true events in Badiou’s work (e.g., the Pauline shift at the center of *Saint Paul: The Foundation of Universalism* [1997/2003], or the transformation of mathematics in the wake of Cantor’s introduction of transfinite ordinality<sup>35</sup>), his analysis of the Paris Commune in *Logics of Worlds* offers an opportunity to see both strong and weak versions of the event at work. Badiou describes in some detail the circumstances around the Commune, noting the failure of Thiers’s government and the presence of the military inside Paris. These details, unpacked in pp. 364-5 of *Logics of Worlds*, describe the world into which the Commune emerged; these details, however, are motivated only insofar as they track the emergence of a singularity, the thing with the potential to rupture or disrupt the world as it exists, an identification that there was *something* significant going on in Paris following the Franco-Prussian War of 1870.<sup>36</sup>

With respect to the event or strong singularity, one in which there are only two degrees of intensity (and a clear temporal mark – *before* the Commune and *after* the Commune), Badiou focuses on the events of 18 March as an occasion of the maximal change and maximal existence he assigns to a strong singularity:

For what counts is not only the exceptional intensity of its surging up – the fact that we are dealing with a violent episode that creates appearing – but the glorious and uncertain consequences that this upsurge, despite its vanishing, sets out.<sup>37</sup>

The Commune and the site of 18 March clarifies Badiou’s comments here; the workers are already part of the world – that is, they already belong to the world described as ‘Paris in Spring 1871’.<sup>38</sup> The militants and workers are mobilized in a way that disrupts the world and surprises Thiers and his government. The consequence of a strong singularity like the March 18 revolt is such that it weaves itself into the relations constituting that world. Badiou explains, “the *force* of a singularity lies in making its consequences, and not just itself, exist maximally.”<sup>39</sup> In other words, the effects of the event’s appearing are powerful enough to inscribe the event in other elements of that world; this is why Badiou, later in the chapter, can point to March 18 as the founding event that animates the spirit “of October 1917, and also by the summer of 1967 in China or the French May ’68.”<sup>40</sup>

<sup>34</sup> Ibid., 1882.

<sup>35</sup> See, for example, Badiou, *Being and Event*, 6/ff.

<sup>36</sup> Badiou, *Logics of Worlds*, 363.

<sup>37</sup> Ibid., 375.

<sup>38</sup> Ibid., 364.

<sup>39</sup> Ibid., 374.

<sup>40</sup> Ibid., 375.

Intuitionist and paraconsistent logics are assigned to transformations of *intermediate* and *imperceptible* intensity, respectively. The intuitionist logic is the logic of the weak singularity, in which,

...the strength of event is not a fixed one. So the event is substitutable by other moderate changes. ... Between this event and the sad 'nothing happens,' there exist a lot of different possibilities ... something happens, but without radical effects.<sup>41</sup>

An example of this weak singularity is found in Badiou's discussion of the emergence of the Third Republic on 4 September 1870. Weak singularities become absorbed in the world as the mark of a modification (something *having happened*) and are assigned the subsidiary role of *fact*; weak singularities do not change the functioning of any world, but rather are accommodated and welcomed into the fold of already-available significances. There is a ready analogy, perhaps, to the discussion of legal decision-making Badiou describes in "The Three Negations," describing the degrees and variances holding between absolute guilt and absolute innocence. Paraconsistent logic describes the situation of the "false event, or a simulacrum," since there are no new values between affirmation and negation under scrutiny (so LEM holds), "but we have event and non-event simultaneously" in which there is no contextual pressure to evaluate the contradiction that has emerged.<sup>42</sup> Though Badiou does not elaborate on this variety of event in "The Three Negations" except to say that "the world is exactly the same," this category is in reserve for evaluating and assessing the consequences of any event following its irruption into appearing.<sup>43</sup>

## 5 Negation, politics, and "real life"

In the preceding, I have discussed the way Badiou's work in "The Three Negations" deploys tools of logic to lay the foundation for the content of his metaphysics, a metaphysics that includes an account of being aligned with classical, Aristotelian logic; an account of appearing, which draws on insights from the intuitionist logic developed by Brouwer; and an account of novelty, which is accommodated using a paraconsistent logic like the one developed by Newton DaCosta. These logics are also used to account for the variable and varying strength of any transformation emerging in a world, a transformation accommodated by the initial possibility in a paraconsistent system to entertain  $P$  and non- $P$  simultaneously.

In accordance with its status at the center of the Cardozo symposium, "The Three Negations" describes the relation of static law to the dynamic, transformative event. The event as "something new," Badiou explains, occurs "only if the rational or conventional laws of this world are interrupted, or put out of their normal effects, by something which happens."<sup>44</sup> Though I have explained Badiou's demonstration of negation above, it is worth noting that Badiou routinely offers political examples to frame his claims. For example, Badiou illustrates the description of the event above by appealing to Marx's theory of revolution, which affirms those elements – "class struggle, contradictions, economic power"<sup>45</sup> – hidden or obscured by capitalism; should these elements come to the fore, however, "the destructive transgression" of capitalism and its modes of order will occur.

Badiou's explicit turn to negation is foregrounded with another political image. Following an insight of Carl Schmitt's Badiou explains, "the very essence of politics is to clearly distinguish between friend and enemy. But finally, the difficult question is the relationship between the two, precisely when the distinction is clear."<sup>46</sup> At issue, as far as Badiou is concerned, is not the definition of friend from enemy, but rather the ways in which these two figures –  $P$  and non- $P$  – might be related. He notes that negation's most radical, or strongest form is the *destruction* of one by another, but negation may also take the weaker form of *domination* of one by another, or a somewhat neutral partnership of enemies against a more immediate

<sup>41</sup> Badiou, "The Three Negations," 1882.

<sup>42</sup> *Ibid.*, 1883.

<sup>43</sup> *Ibid.*

<sup>44</sup> *Ibid.*, 1878.

<sup>45</sup> *Ibid.*

<sup>46</sup> *Ibid.*, 1877.

foe. These are the three modes of negation Badiou unfolds over the remainder of the address, which I've discussed in some detail above.

Attention to this political set up is not, I think, a way of illustrating his formal system in a non-formal context. Rather, these gestures express one of Badiou's more enduring commitments: whatever formal structure (logical or mathematical) is under scrutiny, it must be expressible in language legible to what Badiou calls "real life," and its "illumination," which Badiou sees as the requirement of the philosophical enterprise as a whole, and is a commitment evident in his broader oeuvre.<sup>47</sup> I say a bit more about this below, but one finds this tactic, for example, in the meta-ontological reflections on the construction of situations in *Being and Event*; while Meditations 7 and 8 unpack the technical requirements of situation according to set-theoretic principles of belonging and inclusion, and then the situation's construction using the theorem of the point of excess, Meditation 9 works these structures out in historical and social frameworks. In the Preface to *Logics of Worlds*, Badiou illustrates the notions of world and truth using examples from each of the four conditions of philosophy: science, art, politics, and love. As I explained above, Badiou's Cardozo address maps onto his discussion later in *Logics of Worlds* of the Paris Commune. These examples - whether the theoretical concepts of Marx and Schmitt, or the concrete occurrences in 1871 Paris - offer social, political, and temporal anchors for the formal structure under investigation.

This anchoring also contextualizes Badiou's overall antipathy toward what he identifies as "Anglo-Saxon analytic philosophy," a paradigm resulting in "academic studies lacking any existential, political, or esthetic interest."<sup>48</sup> This is perhaps a heady claim for someone that builds an entire ontological apparatus on the claim that "ontology = mathematics", but it also illuminates Badiou's presence at a symposium concerning the relation of law and event (on the one hand) and the focus of his remarks on a logical apparatus like negation peppered with political examples (on the other). This commitment to anchoring may also clarify the comment Badiou makes in "The Three Negations" when he says, "a concrete political problem can only be formalized in a new logical framework where the word 'negation' has different meanings, and where the relationship between negation and affirmation can be exposed in different ways."<sup>49</sup> If it is the case that philosophy is charged with serving "real life" - to illuminate politics, existence, or aesthetic experience - and Badiou has faith in mathematical and logical structures to map the terrain of this real life, then perhaps those of us keen to cross the analytic-continental divide might recognize this as a condition for any "new metaphysics," some insurance that our conclusions have more-or-less direct traction in social-political, aesthetic, and interpersonal arrangements.

## 6 Objections and replies

Peter Goodrich notes that the occasion for the 2008 symposium "was simply - and yet isn't this the point of any philosophy of law that avoids the temptation to analytic retrogression? - to open a space of thought within law, to address and assess a beyond of law within the confines of the legal."<sup>50</sup> Goodrich sees the symposium and its work with Badiou's offerings as an opportunity to think *ahead* or *beyond* from the place of law, using its own hidebound commitments to precedent, structure, and its effect of a kind of stability to accommodate the instability a so-called "universal singularity," an event, enacts. Goodrich is, like many readers of Badiou's work, apparently fascinated by a theoretical framework that carves a space in appearing for contrary and contradictory elements to emerge, and on this occasion, transform appearing according to its emergence. Put another way, Badiou's invocation of negation as both descriptive of structure and prescriptive of transformation strikes Goodrich as productive, and novel.

To be sure, Badiou's use of mathematical formalism and logical categories have drawn their fair share of criticism. Markus Gabriel raises a series of incisive objections against Badiou's use of mathematical

<sup>47</sup> Badiou and Haéri, *In Praise of Mathematics*, 13.

<sup>48</sup> Ibid.

<sup>49</sup> Badiou, "The Three Negations," 1877.

<sup>50</sup> Goodrich, "Preface," 1872.

formalism as ontology in his 2015 *Fields of Sense*, including Badiou's contested use of set theory.<sup>51</sup> For example, and perhaps most directly, Gabriel explains, "Badiou's set-theory ontology is also utterly ontotheological because it is driven by the fantasy of a language more expressive than any other and yet without any meaning."<sup>52</sup> The 'also' in Gabriel's claim here is a reference to a preceding discussion of contemporary nihilism and its commitment to scientism, which Gabriel defines as a dogmatic belief in a closed totality of scientific knowledge. He sees this dogmatism expressed in Badiou's set-theoretic commitments:

Uninterpreted symbols do not contradict themselves; they merely are or co-exist in some space or other. For contradiction or paradox to arise, there has to be meaning. I am not saying that every grasp of meaning is an act of interpretation, a claim I would certainly reject ... But where no interpretation has ever been imposed, where no one has understood anything against a background of prior lack of understanding, there is no meaning and consequently no contradiction.<sup>53</sup>

Gabriel objects to Badiou's use of set-theoretic formalism as his ontology – an objection that could easily be registered against *any* of the formal deployments he uses – because the formalism appears without a frame in which it can be made to mean something. Indeed, a reader of *Being and Event* could easily see the ontological apparatus as free-floating, anchored only by the rules of the apparatus; lacking any interpretive framework, the formalism simply reinforces itself. Because it is trapped in a self-referential and self-reinforcing loop, there is something like an act of faith required in the assertion that this apparatus tells us something essential about the world or world(s).

These objections offer a reason for my discussing here "The Three Negations," rather than one or more of Badiou's larger tomes. As I have emphasized above, Badiou's work is at its most complete when it actively links a formal apparatus to a more familiar framework. In the case of "The Three Negations," the problem Badiou's work is designed to address is the relationship of a relatively static world of law to a transformation that contradicts or challenges (as in the case of a weak singularity) its organization and use. On the one hand, then, "The Three Negations" reinforces an explicit requirement for philosophy and its tools in service of our understanding the world as it appears and transforms around us. On the other hand, this text suggests a strategy for reading Badiou that may avoid some of the objections levied against his use of formal systems for ontological and metaphysical queries.

For my part, I have recently argued that there is good reason to see Badiou's ontology (in particular) as only a strategy of *mapping*.<sup>54</sup> Following insights from Alex Ling and A.J. Bartlett, I've identified what I've called a "general ontology" at work in Badiou that reads 'down' from the dynamic spatio-temporal world to the static ontological structure underwriting it. This is a deflationary strategy, which attempts to take seriously the depth and breadth of Badiou's deployments of logic and mathematical formalisms without bracketing these moves in favor of the dedication to political or broadly theoretical commitments in Badiou's oeuvre. From this vantage, the departures to technical mathematical and logical apparatuses are assigned to their own portion of the metaphysical enterprise and tasked with describing it in the terms of pure multiplicity, that commitment Badiou makes at the initial pages of *Being and Event*. As such, mathematical and logical formalisms are expressive only insofar as these describe being, appearing, and change. This strategy reinforces the Badiouian insistence on interweaving of philosophy with "real life," a check on metaphysical reflection to ensure its alignment with and legibility in the *conditions* for any further philosophical inquiry: politics, science, art, and love. Though Badiou's work in "The Three

<sup>51</sup> Gabriel, *Fields of Sense: A New Realist Ontology*, 122. This variety of critique is echoed by e.g. Ricardo and David L. Nirenberg, "Badiou's Number: A Critique of Mathematics as Ontology"; Adrian Johnston, "Phantom of Consistency: Alain Badiou and Kantian transcendental idealism"; and Geoffrey Pfeifer, *The New Materialism: Althusser, Badiou and Žižek*. Nirenberg and Nirenberg take issue with the relationship of a set-theoretic ontology to everyday appearing; Johnston and Pfeifer, respectively, object to the presence of the 'count procedure' in Badiou's work as an imposition from without. I respond to Johnston's and Pfeifer's critique in Vartabedian, *Multiplicity and Ontology in Deleuze and Badiou*, 152.

<sup>52</sup> Gabriel, *Fields of Sense*, 130. The entirety of this text's chapter four, "Limits of Set-Theoretical Ontology and Contemporary Nihilism," lays out Gabriel's critique of Badiou.

<sup>53</sup> Gabriel, *Fields of Sense*, 118.

<sup>54</sup> Cf. Vartabedian, *Multiplicity and Ontology in Deleuze and Badiou*, 140-147.

Negations” proceeds with broad gestures to the theoretical apparatus of revolution in Marx and against the background of the relationship of law and event, I have discussed the way his work may be appended to more specific instances, including the discussion of the logical relationships at stake in “Logic of the Site” and its description of the Paris Commune.

I recognize that the deflationary reading of Badiou’s work does not address another significant objection from Gabriel and a rejoinder by Fabio Gironi concerning the relation between being and appearing, between the ontological and the empirical. That is, the cross from the ontological to the empirical is not clear in Badiou’s work or is at best *only* analogical. Gironi suggests a “materialist” solution to this problem, developing a mathematized ontology that navigates the Scylla of ontotheology and the Charybdis of idealism, insisting that – in fact – a kind of realism is required to negotiate the relationship between the ontological and the empirical.<sup>55</sup> Gironi wisely refers to the ecumenical approach required for the new metaphysics as “synoptic” and necessitating a kind of “ambidexterity” when it comes to approaching problems in the philosophy of science.<sup>56</sup> One is certainly invited to develop this ambidexterity when reading Badiou, especially those of us approaching his work from a typically Continental position.

Adrian Moore proposes that the task of metaphysics is straightforward: “Metaphysics is the most general attempt to make sense of things.”<sup>57</sup> Badiou’s work in “The Three Negations” offers a potent charge for the new metaphysics, insofar as it is a text that demonstrates some facility negotiating the cornerstones of investigation – being, appearing, and change – with a formal apparatus, while insisting that the apparatus and investigation each have stakes in the way we understand the world as it appears to us and transforms around us. At the very least, Badiou’s brief text invites the reader to consider the relationship of negation to our understanding of traditional metaphysical categories and to the sense we make of the world.

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<sup>55</sup> Gironi develops this account beginning in chapter 3 of *Naturalizing Badiou*.

<sup>56</sup> Gironi, *Naturalizing Badiou*, 1.

<sup>57</sup> Moore, *The Evolution of Modern Metaphysics*, 1.